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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) 08350.0608-00000	
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<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <div style="display: flex; justify-content: space-between;"><div style="width: 45%;"><p><input type="checkbox"/> applicant/inventor.</p><p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.</p><p><input type="checkbox"/> attorney or agent of record. Registration number _____</p><p><input checked="" type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 <u>55,288</u></p></div><div style="width: 45%; text-align: right;"><p>_____ Signature</p><p><u>Panyin A. Hughes</u> Typed or printed name</p><p><u>(202) 408-4324</u> Telephone number</p><p><u>March 6, 2006</u> Date</p></div></div> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>			

☐ *Total of ____ forms are submitted.

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PATENT: **Mail Stop AF**

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New Attorney Docket No. 08350.0608-00000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
)	
Todd D. CREGER et al.)	Group Art Unit: 2128
)	
Application No.: 10/006,959)	Examiner: DAY, HERNG-DER
)	
Filed: November 5, 2001)	
)	
For: METHOD FOR COMPENSATING)	Confirmation No.: 2767
FOR VARIATIONS IN MODELED)	
PARAMETERS OF MACHINES)	

Mail Stop AF

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicants request a pre-appeal brief review of the rejections set forth in the final Office Action mailed on September 8, 2005. Applicants respectfully assert that (1) the application has been at least twice rejected; (2) this request is being filed concurrently with a Notice of Appeal; (3) this request is being filed prior to an Appeal Brief; and (4) this request is five or less pages in length, all in accordance with the guidelines set forth in the Official Gazette Notice of July 12, 2005. Applicants request the prompt review of the Examiner's rejections set forth in the final Office Action.

Anticipation Rejection

In the final Office Action, claims 1-5 and 7-8 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Pub. No. 2002/0138240 to Jelley

et al. ("Jelley"). An anticipation rejection is proper only if each and every element as set forth in the claim is found in a single prior art reference. M.P.E.P. § 2131.

Applicants respectfully assert that this rejection is improper because Jelley does not disclose each and every element as set forth in the claims. For example, with respect to independent claims 1, Jelley does not disclose, among other aspects, establishing a model development machine having a first at least one model to predict a machine parameter, establishing at least one test machine having a second at least one model to predict the machine parameter, comparing the data from the at least one test machine to corresponding data of the model development machine, and updating at least one of an estimator and a model of each at least one test machine in response to variations in the compared data. And regarding independent claim 7, Jelley does not disclose, among other aspects, delivering a neural network model from the developmental machine to the test machine, determining a computed parameter on the test machine, estimating the parameter on the test machine with the delivered neural network, comparing the computed parameter with the estimated parameter, and updating at least one of an estimator and the neural network model on the test machine in response to variations in the computed parameter and the estimated parameter.

Jelley discloses a method for predicting an operating characteristic of a rotary earth boring bit design through the use of a numeric algorithm formed by a neural network. The neural network is trained by inputting each measured operating characteristic for each set of drill bit design parameters and each set of operating conditions into a digital computer programmed to provide neural network computations. If the predicted results closely match the test results, then the neural network is

considered to be properly trained. The numeric algorithm takes in as input a first set of numbers representing drill bit design parameters and a plurality of second sets of numbers representing operating conditions of the drill bit and outputs one or more operating characteristics of the drill bit at each set of operating conditions. *See, e.g.*, paragraph nos. 19, 20, 61, and 62 of Jelley.

Accordingly, Jelley is directed to the use of a neural network to accurately predict one or more operating characteristics of an earth boring drill operated under a set of known operating conditions. In contrast, Applicants' disclosure, recites among other aspects, establishing a model development machine having a first at least one model to predict a machine parameter, establishing at least one test machine having a second at least one model to predict the machine parameter, comparing the data from the at least one test machine to corresponding data of the model development machine, and updating at least one of an estimator and a model of each at least one test machine in response to variations in the compared data. In other words, both the model development machine and the test machine include models to predict machine parameters. Data obtained from the test machine is compared to the model development machine and at least one of an estimator and a model associated with the test machine are updated in response to variations in the compared data. Consequently, the test machine takes advantage of the learning process the model development machine has undergone. *See, e.g.*, Specification, page 1-2, paragraphs 3-7.

Jelley only discloses a single model to predict a machine parameter, and thus cannot disclose the model development machine and test machine each having a

model to predict a machine parameter as recited in claim 1. Further, Jelley, with only one neural network cannot disclose or suggest updating at least one of an estimator and a model of a test machine in response to variations in compared data including data from a model development machine.

On page 4 of the Advisory Action Before the Filing of an Appeal Brief, the Examiner asserts that “the limitation, ‘establishing a model development machine having a first at least one model to predict a machine parameter’ is nothing more than providing a trained neural network disclosed in Jelley.” Applicants respectfully disagree. Providing a trained neural network requires only one model, whereas claims 1-5 and 7-8 require at least two models. In particular, claims 1-5 and 7-8 recite, among other things, both a model development machine having a first at least one model to predict a machine parameter and at least one test machine also having at least one model to predict a machine parameter.

Obviousness Rejection

Also in the Office Action, claims 6 and 10-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Jelley in view of U.S. Patent No. 6,411,908 to Talbott. A prima facie case of obviousness requires, inter alia, that the prior art references, when combined, must teach or suggest every aspect of the claims. M.P.E.P. § 2143.

Applicants respectfully assert that this rejection is improper because Talbott does not remedy the deficiency noted above regarding Jelley. Talbott merely discloses a method for assembling condition monitoring histories of same-type machines that have lived in same-type environments and have failed as a result of the same failure mode.

(See Abstract.) Talbot does not disclose among other aspects, updating at least one of an estimator and a model, as provided for in claims 6 and 10-12.

Conclusion

For a more detailed account of Applicants' arguments traversing the rejections under 35 U.S.C. §§ 102(e) and 103(a) as set forth in the Final Office Action, reference is made herein to pages 3-5 of the Amendment filed in this application on January 9, 2005.

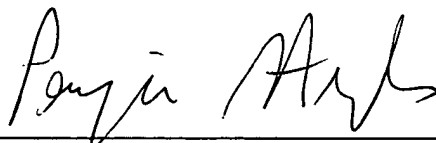
With respect to the objection to the drawings in the final Office Action, Applicants assume that the amendment to the specification provided in the Amendment filed after the final Office Action was sufficient to remove the objection. If this assumption is not correct, please advise Applicants accordingly.

Because the Examiner's rejection of claims 1-12 includes factual and legal deficiencies with regard to the rejection under 35 U.S.C. §§ 102(e) and 103(a) and the M.P.E.P., Applicants are entitled to a pre-appeal brief review of the Final Office Action. Based on the foregoing arguments, Applicants request that the rejection of these claims be withdrawn and the claims allowed.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: March 8, 2006

By: 
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